CLAIMS

What is claimed is:

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	1.	A method	comprising:
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- 2 electronically capturing visual features associated with a speaker
- 3 speaking;
- 4 electronically capturing audio;
- 5 matching selective portions of the audio with the visual features; and
- 6 identifying the remaining portions of the audio as potential noise not
- 7 associated with the speaker speaking.
- 1 2. The method of claim 1 further comprising:
- 2 electronically capturing additional visual features associated with a
- 3 different speaker speaking; and
- 4 matching some of the remaining portions of the audio from the
- 5 potential noise with the additional speaker speaking.
- 1 3. The method of claim 1 further comprising generating parameters
- 2 associated with the matching and the identifying and providing the
- 3 parameters to a Bayesian Network which models the speaker speaking.
- 1 4. The method of claim 1 wherein electronically capturing the visual
- 2 features further includes processing a neural network against electronic
- 3 video associated with the speaker speaking, wherein the neural network is
- 4 trained to detect and monitor a face of the speaker.
- 1 5. The method of claim 4 further comprising filtering the detected face of
- 2 the speaker to detect movement or lack of movement in a mouth of the
- 3 speaker.
- 1 6. The method of claim 1 wherein matching further includes comparing
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- 2 portions of the captured visual features against portions of the captured
- 3 audio during a same time slice.
- 1 7. The method of claim 1 further comprising suspending the capturing of
- 2 audio during periods where select ones of the captured visual features
- 3 indicate that the speaker is not speaking.
- 1 8. A method, comprising:
- 2 monitoring an electronic video of a first speaker and a second 3 speaker;
- concurrently capturing audio associated with the first and second speaker speaking;
- analyzing the video to detect when the first and second speakers are moving their respective mouths; and
- matching portions of the captured audio to the first speaker and other portions to the second speaker based on the analysis.
- 9. The method of claim 8 further comprising modeling the analysis for subsequent interactions with the first and second speakers.
- 1 10. The method of claim 8 wherein analyzing further includes processing
- 2 a neural network for detecting faces of the first and second speakers and
- 3 processing vector classifying algorithms to detect when the first and second
- 4 speakers' respective mouths are moving or not moving.
- 1 11. The method of claim 8 further comprising separating the electronic
- video from the concurrently captured audio in preparation for analyzing.
- 1 12. The method of claim 8 further comprising suspending the capturing
- 2 of audio when the analysis does not detect the mouths moving for the first
- and second speakers.

- 1 13. The method of claim 8 further comprising identifying selective
- 2 portions of the captured audio as noise if the selective portions have not
- 3 been matched to the first speaker or the second speaker.
- 1 14. The method of claim 8 wherein matching further includes identifying
- 2 time dependencies associated with when selective portions of the electronic
- 3 video were monitored and when selective portions of the audio were
- 4 captured.
- 1 15. A system, comprising:
- 2 a camera;
- 3 a microphone; and
- 4 a processing device, wherein the camera captures video of a speaker
- 5 and communicates the video to the processing device, the microphone
- 6 captures audio associated with the speaker and an environment of the
- 7 speaker and communicates the audio to the processing device, the
- 8 processing device includes instructions that identifies visual features of the
- 9 video where the speaker is speaking and uses time dependencies to match
- 10 portions of the audio to those visual features.
- 1 16. The system of claim 15 wherein the captured video also includes
- 2 images of a second speaker and the audio includes sounds associated with
- 3 the second speaker, and wherein the instructions matches some portions of
- 4 the audio to the second speaker when some of the visual features indicate
- 5 the second speaker is speaking.
- 1 17. The system of claim 15 wherein the instructions interact with a neural
- 2 network to detect a face of the speaker from the captured video.
- 1 18. The system of claim 17 wherein the instructions interact with a pixel Attorney Docket No. 884.C05US1 20 Client Ref. No. P18486

- 2 vector algorithm to detect when a mouth associated with the face moves or
- 3 does not move within the captured video.
- 1 19. The system of claim 18 wherein the instructions generate parameter
- 2 data that configures a Bayesian network which models subsequent
- 3 interactions with the speaker to determine when the speaker is speaking
- 4 and to determine appropriate audio to associate with the speaker speaking
- 5 in the subsequent interactions.
- 1 20. A machine accessible medium having associated instructions, which
- when accessed, results in a machine performing:
- 3 separating audio and video associated with a speaker speaking;
- 4 identifying visual features from the video that indicate a mouth of the
- 5 speaker is moving or not moving; and
- 6 associating portions of the audio with selective ones of the visual
- 7 features that indicate the mouth is moving.
- 1 21. The medium of claim 20 further including instructions for associating
- 2 other portions of the audio with different ones of the visual features that
- 3 indicate the mouth is not moving.
- 1 22. The medium of claim 20 further including instructions for:
- 2 identifying second visual features from the video that indicate a
- 3 different mouth of another speaker is moving or not moving; and
- 4 associating different portions of the audio with selective ones of the
- 5 second visual features that indicate the different mouth is moving.
- 1 23. The medium of claim 20 wherein the instructions for identifying further
- 2 include instructions for:
- processing a neural network to detect a face of the speaker; and
- 4 processing a vector matching algorithm to detect movements of the

- 5 mouth of the speaker within the detected face.
- 1 24. The medium of claim 20 wherein the instructions for associating
- 2 further include instructions for matching same time slices associated with a
- 3 time that the portions of the audio were captured and the same time during
- 4 which the selective ones of the visual features were captured within the
- 5 video.
- 1 25. An apparatus, residing in a computer-accessible medium, comprising:
- 2 face detection logic;
- 3 mouth detection logic; and
- 4 audio-video matching logic, wherein the face detection logic detects a
- 5 face of a speaker within a video, the mouth detection logic detects and
- 6 monitors movement and non-movement of a mouth included within the face
- 7 of the video, and the audio-video matching logic matches portions of
- 8 captured audio with any movements identified by the mouth detection logic.
- 1 26. The apparatus of claim 25 wherein the apparatus is used to configure
- 2 a Bayesian network which models the speaker speaking.
- 1 27. The apparatus of claim 25 wherein the face detection logic comprises
- 2 a neural network.
- 1 28. The apparatus of claim 25 wherein the apparatus resides on a
- 2 processing device and the processing device is interfaced to a camera and
- 3 a microphone.